

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: PISCASSIC ICE POND	Lake Area (ha):	4.17
Town: NEWFIELDS	Maximum depth (m):	1.2
County: Rockingham	Mean depth (m):	0.5
River Basin: Coastal	Volume (m ³):	22500
Latitude: 43°01'55" N	Relative depth:	0.5
Longitude: 70°58'17" W	Shore configuration:	3.04
Elevation (ft): 95	Areal water load (m/yr):	354.5
Shore length (m): 2200	Flushing rate (yr ⁻¹):	657.0
Watershed area (ha): 3233.6	P retention coeff.:	0.02
% watershed ponded: < 0.10	Lake type:	natural w/dam

BIOLOGICAL:

22 February 1996

24 July 1995

DOM. PHYTOPLANKTON (% TOTAL)	#1	NO PHYTOPLANKTON	DINOBYRON 50%
	#2	SAMPLE COLLECTED	MOUGEOTIA 20%
	#3		CHRYSOSPHAERELLA 10%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			10.31
DOM. ZOOPLANKTON (% TOTAL)	#1	NO ZOOPLANKTON	NAUPLIUS LARVA 46%
	#2	SAMPLE COLLECTED	CYCLOPOID COPEPOD 28%
	#3		
ROTIFERS/LITER			162
MICROCRUSTACEA/LITER			975
ZOOPLANKTON ABUNDANCE (#/L)			1239
VASCULAR PLANT ABUNDANCE			Very abundant
SECCHI DISK TRANSPARENCY (m)			1.1
BOTTOM DISSOLVED OXYGEN (mg/L)		11.4	0.4
BACTERIA (E. coli, #/100 ml)	#1		7
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : 500

CHEMICAL:

Lake: PISCASSIC ICE POND
Town: NEWFIELDS

	22 February 1996		24 July 1995		
DEPTH (m)	1.0		1.0		
pH (units)	5.8		6.8		
A.N.C. (Alkalinity)	4.3		19.1		
NITRATE NITROGEN	0.18		< 0.10		
TOTAL KJELDAHL NITROGEN	0.30		0.78		
TOTAL PHOSPHORUS	0.019		0.035		
CONDUCTIVITY (μ mhos/cm)	95.2		121.0		
APPARENT COLOR (cpu)	70		120		
MAGNESIUM			1.48		
CALCIUM			6.3		
SODIUM			13.0		
POTASSIUM			1.24		
CHLORIDE	19		25		
SULFATE			2		
TN : TP	25		22		
CALCITE SATURATION INDEX			2.4		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1995

D.O. S.D. PLANT CHL TOTAL CLASS

**	4	6	2	12	Eutro.
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COMMENTS:

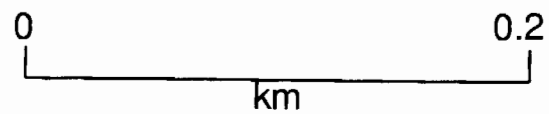
1. No public access; launch canoe over guard rail at the outlet.
2. This is a shallow and very weedy eutrophic pond on the Piscassic River. It drains a relatively large area and has an extremely rapid flushing rate (almost twice per day).
3. Despite the rapid flushing rate, a relative rich algal population was able to develop. Filamentous algae and associated tiny pennate diatoms were a significant part of the planktonic algal community.
4. The pond drains significant wetland areas and has a dark tea color. Sodium and chloride values suggest salt drainage into the pond.

Piscassic Ice Pond Newfields



all depths 5 feet or less

Unnavigable

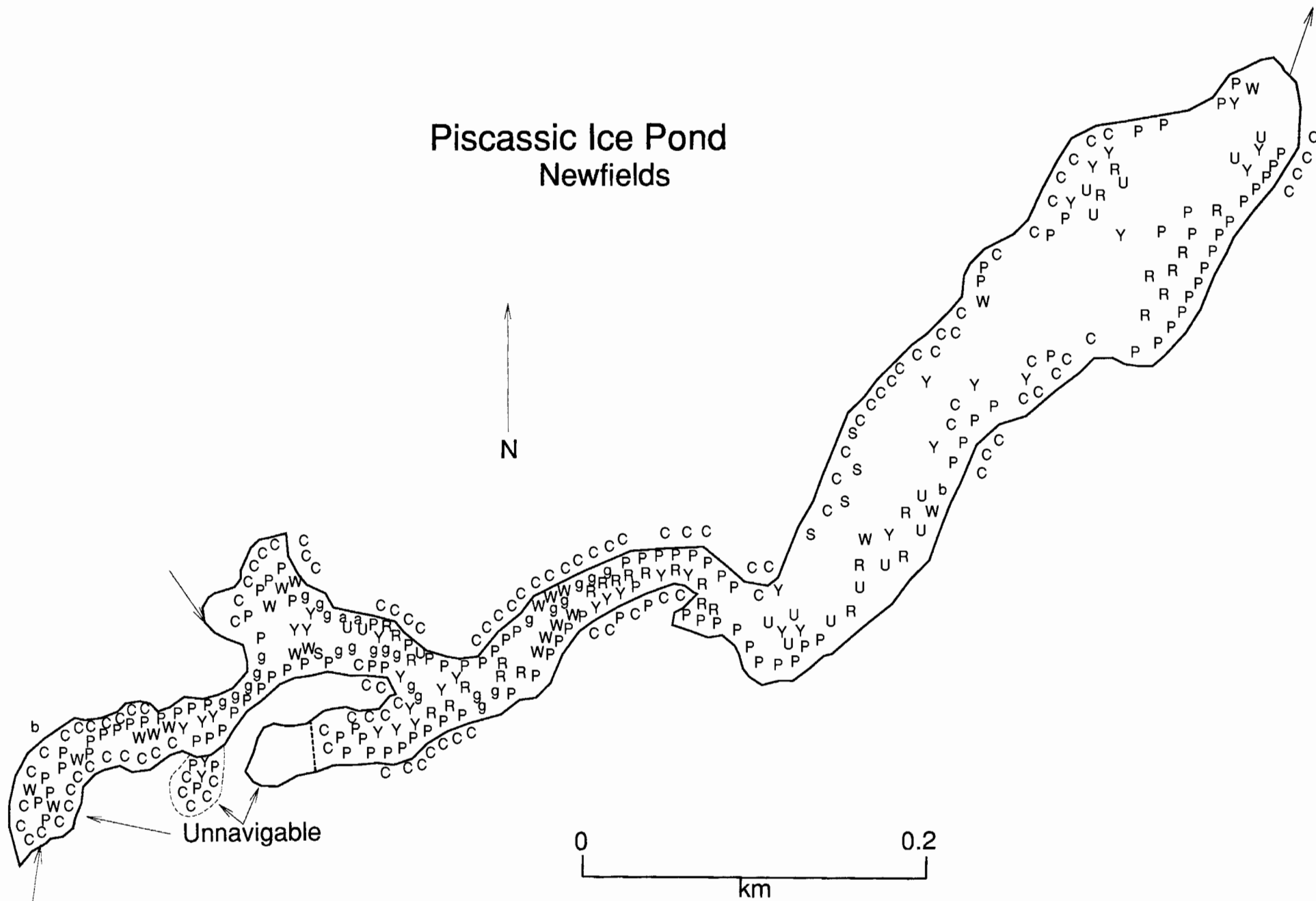


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COMMENTS :

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Piscassic Ice Pond Newfields



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